

REMARKS

This communication is a full and timely response to the final Office Action dated March 12, 2009. By this communication, claim1 is amended. Support for the amended subject matter can be found, for example, on page 4, lines 18-26 of specification.

In numbered paragraph 3 on page 2 of the Office Action, claims 7, 8, 13, 16, and 18 stand rejected under 35 U.S.C. §103(a) for alleged unpatentability over *Shimizu et al.* U.S. Patent No. 6,201,696 in view of *Nidan et al.* U.S. Patent Pub. No. 2002/0005072 further, in numbered paragraph 4 on page 8 of the Office Action, claims 17 and 19 are rejected under 35 U.S.C. §103(a) for allegedly being unpatentable over the *Shimizu* and *Nidan* patents and further in view of *Sakamoto et al.* U.S. Patent Pub. No. 2004/0014317. Applicants respectfully traverse these rejections.

Applicants' claim 7 broadly encompasses the exemplary features shown in Figures 1-6. In particular, Figure 7 recites, in part, a first electrically insulating material disposed between an electrically insulating substrate and a first electrically conductive layer and in a corner region formed by the first electrically conductive layer and a peripheral region of the electrically insulating substrate.

Shimizu and *Nidan* when viewed individually or in combination fail to disclose or suggest at least the foregoing feature.

Shimizu discloses a semiconductor power device in which a solidified insulating material is disposed on an outer edge region of a conductive film and the peripheral region of an insulating substrate where the conductive film is formed on the insulating substrate. In another embodiment, the solidified insulating material is

disposed into an interface between the conductive film and the peripheral region of the insulating substrate. These configurations are designed to suppress the creeping breakdown and the creeping discharge at an interface of two kinds of insulating materials or at an interface of the substrate and a silicon gel used in the packet structure as the insulating material.

Shimizu, however, fails to disclose or suggest the disposition of a first electrically insulating material between an electrically insulating substrate and a first electrically conductive layer as recited in Applicants' claims.

Nidan discloses a pressure sensor having a diaphragm formed on a main surface. A resin member can be disposed on the diaphragm so that pressure to the diaphragm can be transmitted through the resin member. *Nidan* discloses that the resin member can be formed of an epoxy resin, polyimide resin, or silicon material and is injected into a space between the sensor chip so that the space is filled with the resin member.

Applicants respectfully submit that one of ordinary skill would not have looked to *Nidan* in an effort to remedy the deficiencies of *Shimizu* because the functional characteristics of the resin member as applied in *Nidan* are not transferable to the device described in *Shimizu*. Furthermore, *Shimizu* does not disclose or suggest providing a solidified insulating material between a conductive film and the insulating substrate. Rather, *Shimizu* describes a way for contacting the copper film tightly with the substrate by covering all the edges and corners of the film with the resin, and a way for polishing to smooth the surface of the outer edge of the substrate. See col. 4, lines 41-46. Thus, there appears to be no rationale basis for combining,

integrating, or otherwise substituting the features of *Nidan* with those described in *Shimizu* such that Applicants' claims are rendered obvious.

Even assuming arguendo, that these references somehow could be reasonably combined. Applicants respectfully submit that the most reasonable modification of *Shimizu* find the epoxy resin formed on an outer edge region of the conductive film and the peripheral region of the insulating substrate be replaced with the polyimide material described in *Nidan*.

In summary, *Nidan* and *Shimizu* when applied individually or collectively as alleged by the Examiner fail to disclose or suggest every element recited in Applicants' claims. Moreover, *Sakamoto*, which is applied in combination with the primary references two depending claims 17 and 19, fails to remedy the deficiencies of the latter with respect to the combination of features recited in independent claim 7. For at least these reasons, a *prima facie* case of obvious has not been established.

The Office is reminded that the Office has the initial burden of establishing a **factual basis** to support the legal conclusion of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). For rejections under 35 U.S.C. § 103(a) based upon a combination of prior art elements, in KSR Int'l v. Teleflex Inc., 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007), the Supreme Court stated that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some **articulated reasoning with some rational underpinning** to support the legal conclusion of obviousness." In re

Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (emphasis added). For at least the foregoing reasons, withdrawal of this rejection is respectfully requested. Based on the foregoing discussion, withdrawal of all rejections under 35 U.S.C. §103 is respectfully requested.

Conclusion

Based on at least the foregoing amendments and remarks, Applicants respectfully submit that claims 7-19 are allowable, and this application is in condition for allowance. In the event any issues remain, the Examiner is invited to contact Applicants' representative identified below.

Respectfully submitted,

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